

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Placed and Trademark Office Addless: COMMISSIONER FOR PATENTS FOR 450 Alexandria Virgina 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/770,762	01/25/2001	Robert A. Wright	50269-0745	7760	
29989 7590	12/28/2006 RMO TRUONG & BE	EXA!	EXAMINER		
2055 GATEWAY		LEE, F	LEE, PHILIP C		
SUITE 550 SAN JOSE, CA 95110			ART UNIT	PAPER NUMBER	
SAN JOSE, CA J.			2152		
		·			
SHORTENED STATUTORY PI	ERIOD OF RESPONSE	MAIL DATE	DELIVE	RY MODE	
3 MONTI	-IS	12/28/2006	PA	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	09/770,762	WRIGHT ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Philip C. Lee	2152				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period value to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONED	l. ely filed the mailing date of this communication. 0 (35 U.S.C. § 133).				
Status	,					
1) Responsive to communication(s) filed on 17 O	ctober 2006.					
, —	action is non-final.					
· —						
closed in accordance with the practice under E						
Disposition of Claims						
4)⊠ Claim(s) <u>30-51</u> is/are pending in the application	1.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>30-51</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/26/2006.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate				

Art Unit: 2152

- 1. This action is responsive to the amendment and remarks filed on March 16, 2006.
- 2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/17/2006 has been entered.
- 3. Claims 30-51 are presented for examination and claims 1-29 are canceled.
- 4. The text of those sections of Title 35, U.S. code not included in this office action can be found in a prior office action.

Claim Rejections - 35 USC 103

- 5. Claims 30 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morshed et al, U.S. Patent 6,760,903 (hereinafter Morshed) and Lanteigne et al, U.S. Patent 6,557,056 (hereinafter Lanteigne) in view of Mathur et al, U.S. Patent 6,704,807 (hereinafter Mathur).
- 6. Morshed, Lanteigne, and Mathur were cited in the last office action.

Art Unit: 2152

7: As per claims 30 and 42, Morshed taught the invention substantially as claimed comprising:

maintaining a connection, via a network (col. 32, lines 50-57), between a first proxy on a first server and a second proxy on a second server (col. 43, lines 23-36);

while maintaining the connection:

a plurality of first processes on the first server communicating with a plurality of second processes on the second server via the connection (col. 43, lines 1-12) by:

the plurality of first processes exchanging data with the first proxy (col. 37, lines 25-27); and the first proxy exchanging the data via the connection with the second proxy (col. 43, lines 8-12, 23-29).

8. Although Morshed taught exchanging data with the first proxy (col. 37, lines 25-27), however, Morshed did not teach for each first process of the plurality of first processes: the each first process writing data to the respective unique region of the each first process and the first proxy reading data from the respective unique region of the each first process. Lanteigne taught wherein exchanging data with a first proxy includes, for each first process: the each first process writing data to the respective unique region; and the first proxy writing data to the respective unique region, and the each first process reading data from the respective unique region (col. 13, lines 5-31)

Art Unit: 2152

- It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed and Lanteigne because Lanteigne's teaching would allow Morshed's processes to communicate via the queuing system data structure in order to permit non-blocking access between processes in a multiprocessor system.

 Furthermore, Lanteigne's queuing system can support multiple accesses from different processes of Morshed's system in a robust manner and may avoid becoming blocked by a single process (col. 3, lines 56-67).
- 10. Morshed and Lanteigne did not teach shared memory. Mathur taught each of the plurality of processes is assigned a unique region of the shared memory (col. 7, line 61-col. 8, line 14).
- 11. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne and Mathur because Mathur's method of assigning memory region to processes would increase the reliability of Morshed's and Lanteigne's systems by avoiding error due to applications accessing memory outside of their allocated slot (col. 8, lines 5-7).
- 12. As per claims 31 and 43, Morshed, Lanteigne and Mathur taught the invention substantially as claimed in claims 30 and 42 above. Lanteigne further taught comprising:
- a first process of the plurality of first processes writing data to region of the shared memory that is assigned to the first process (col. 13, lines 5-31); and

Art Unit: 2152

the first process causing the state of a process mark device to change to a first state to indicate that the region is not writeable by the first process, wherein the process mark device has the first state and a second state that indicates that the region is writeable by the first process (col. 16, lines 7-36; col. 9, lines 37-42).

- 13. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason as claims 30 and 42 above.
- 14. As per claims 32 and 44, Morshed, Lanteigne, and Mathur taught the invention substantially as claimed as in claims 31 and 42 above. Lanteigne further taught prior to the first process writing data to the region of the shared memory, the first process determining whether the region of the shared memory is currently writeable by the first process (see Lanteigne, col. 13, lines 5-31). (Note that Mathur taught region of the shared memory is assigned to the first process)
- 15. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.
- 16. As per claims 33 and 45, Morshed, Lanteigne, and Mathur taught the invention substantially as claimed as in claims 32 and 44 above. Lanteigne further taught the first process

Art Unit: 2152

determining whether the region of the shared memory is currently writeable comprises the first process checking the state of the process mark device (see Lanteigne, col. 13, lines 5-31). (Note that Mathur taught region of the shared memory is assigned to the first process)

- 17. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.
- 18. As per claims 34 and 46, Morshed, Lanteigne, and Mathur taught the invention substantially as claimed as in claims 33 and 45 above. Lanteigne further taught the first process causing the state of a proxy mark device to change to a first state to indicate that the region of the shared memory is readable by the first proxy, wherein the proxy mark device has the first state and a second state that indicates that the region is not readable by the first proxy (see Lanteigne, col. 16, lines 7-36; col. 9, lines 37-42). (Note that Mathur taught region of the shared memory is assigned to the first process)
- 19. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.

Art Unit: 2152

- 20. As per claims 35 and 47, Morshed, Lanteigne, and Mathur taught the invention substantially as claimed as in claims 34 and 46 above. Lanteigne further taught the first process writing to the process mark device (col. 16, lines 7-36; col. 9, lines 37-42).
- 21. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.
- As per claims 36 and 48, Morshed, Mathur and Lanteigne taught the invention substantially as claimed as in claims 34 and 46 above. Lanteigne further taught in response to the proxy mark device changing to the first state, the first proxy determining that there is data to be read from the region (col. 13, lines 5-31; col. 16, lines 7-36; col. 9, lines 37-42). (Note that Mathur taught region of the shared memory is assigned to the first process. See Mathur, col. 7, line 61-col. 8, line 14)
- 23. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.
- 24. As per claims 37 and 49, Morshed, Lanteigne, and Mathur taught the invention substantially as claimed as in claims 34 and 46 above. Lanteigne further taught comprising: the first proxy reading data from the region (col. 13, lines 5-31); and

Art Unit: 2152

the first proxy causing the proxy mark device to change to the second state (col. 13, lines 5-31). (Note that Mathur taught region of the shared memory is assigned to the first process. See Mathur, col. 7, line 61-col. 8, line 14)

- 25. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.
- As per claims 38 and 50, Morshed, Lanteigne, and Mathur taught the invention substantially as claimed as in claims 37 and 49 above. Lanteigne further taught the process mark device changing to the second state in response to the proxy mark device changing to the second state (fig. 10, col. 13, lines 5-31; col. 16, lines 7-36).
- 27. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.
- 28. As per claims 39 and 51, Morshed, Lanteigne, and Mathur taught the invention substantially as claimed as in claims 30 and 42 above. Lanteigne further taught comprising:

a first process of the plurality of first processes reading data from a region of the shared memory that is assigned to the first process (col. 13, lines 5-31); and

Art Unit: 2152

the first process causing the state of a process mark device to change to a first state to indicate that the region is not readable by the first process, wherein the process mark device has the first state and a second state that indicates that the region is readable by the first process (col. 16,lines 7-36; col. 9, lines 37-42). (Note that Mathur taught region of the shared memory is assigned to the first process. See Mathur, col. 7, line 61-col. 8, line 14)

- 29. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to combine the teachings of Morshed, Lanteigne, and Mathur for the same reason in claim 31 above.
- 30. As per claims 40 and 41, they fail to teach or define above or beyond claims (already rejected claims 31-39).
- 31. Applicant's arguments with respect to claims 30-51 have been considered but are moot in view of the new ground(s) of rejection.
- 32. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dennie, U.S. Patent Application Publication 2002/0059503

33. A shortened statutory period for reply to this Office action is set to expire THREE MONTHS from the mailing date of this action. Any inquiry concerning this communication or

Art Unit: 2152

earlier communications from the examiner should be directed to Philip C Lee whose telephone number is (571)272-3967. The examiner can normally be reached on 8 AM TO 5:30 PM Monday to Thursday and every other Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

P.L.

BUNJOB JAROENCHONWANIT SUPERVISORY PATENT EXAMINER